



Appendix A

Forms

Contents

APHIS Form 2061 (Residue Sample for Food or Feed Product)	page-A-1-2
PPQ Form 429 (Fumigation Record)	page-A-1-11
PPQ Form 519 (Compliance Agreement)	page-A-1-16
PPQ Form 523 (Emergency Action Notification)	page-A-1-19
PPQ Form 449-R (Temperature Recording Installation Report)	page-A-1-24
PPQ Form 203 (Foreign Site Certificate of Inspection and/or Treatment)	page-A-1-25
PPQ Form 556 (In Transit Cold Treatment Clearance Report)	page-A-1-26
APHIS Form 205-R (Instructions and Worksheet for Calibrating Portable Temperature Sensors)	page-A-1-27
APHIS Form 206-R (Test of the Accuracy of the Permanent RTD Sensors Installed in Hot Water Tanks)	page-A-1-28
APHIS Form 207-R (Sensor Location Diagram Fruit Weights and Pulp Temperatures)	page-A-1-29
APHIS Form 208 (Performance Test for Mango Hot Water Immersion Tank)	page-A-1-30
Calibration of Temperature Probes (Cold Treatment)	page-A-1-31
Location of Temperature Sensors in Containerized Cargo (Cold Treatment)	page-A-1-32
General Requirements for Approval of Integral Containers Used for Cold Treatment	page-A-1-33
Application for USDA-APHIS Approval of Self-Refrigerated Containers	page-A-1-34

This Appendix contains example forms and instructions for completing the forms you may need when conducting or monitoring a fumigation.

APHIS Form 2061 (Residue Sample for Food or Feed Product)

Example

NO CARBONS REQUIRED - PRESS HARD - YOU ARE MAKING 3 COPIES

USDA-APHIS RESIDUE SAMPLE FOR FOOD OR FEED PRODUCT																									INSTRUCTIONS: Use a separate form for each sample. Take one sample before treatment and one after. Submit original under separate cover and yellow copy with sample. Retain pink copy.																																																																
1. PPO STATION										2. COMMODITY										3. COMMODITY LOT SIZE					4. DATE OF FUMIGATION																																																																
Name (first 5 letters)										Code					Name (first 6 letters)										Code					No. of Kg					Month					Day					Year																																												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30																																																												
*Sample Taken 0 = Pre-treatment 1 = Post-treatment																																																																																									
6. DATE OF SAMPLE										7. SAMPLE NUMBER										8. PESTICIDE										9. PESTICIDE USE										10. PESTICIDE EXPOSURE PERIOD TIME (hours)										11. AERATION TIME (hours)																																							
Month										Day										Year										Name										Code										Rate (g/m ²)										Total grams																													
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70																																																		
12. REMARKS																																																																																									
13. SAMPLE COLLECTOR'S NAME																																			14. COLLECTOR'S TELEPHONE NO. (ITS or Comm. no.)																																																						
AC ()																																																																																									
FOR LABORATORY USE ONLY																																																																																									
15. LABORATORY ACCESSION NUMBER										16. PESTICIDE CODE										17. PRE-TREATMENT SAMPLE										18. POST-TREATMENT SAMPLE										19. POST-TREATMENT SAMPLE																																																	
																				Organic Residue										Inorganic Residue										Organic Residue										Inorganic Residue																																							
63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102																																																		
**Corrected for Recovery Percent 0 = No 1 = Yes																																																																																									
CONFIRMATION																																																																																									
21. METHOD																																			22. ANALYST																																																						
APHIS FORM 2061 (MAR 92)																																			Replaces APHIS FORM 8006 (1/91) which may be used																																																						
*U.S. GPO: 1992-319-827/80079																																																																																									

FIGURE A-1-1: Example of APHIS Form 2061 (Residue Sample for Food or Feed Product)

Purpose

This form is used to provide information on samples of food and feed products sent to the National Monitoring Residue and Analysis Laboratory (NMRAL) for residue analysis (see the following distribution for address). This form provides information on the commodity and the fumigation performed under a FIFRA Section 18 quarantine exemption.

Instructions

Block Number	Instruction
1 Code	Fill in the first six letters of your location. Enter one of the following: 551 for Funded Program Support (regular time) 552 for Reimbursable Program Support (overtime)
2 Code	Fill in the first six letters of the commodity. See the list of codes beginning on page A-1-3 . If there is no code, describe commodity in Remarks.
3	Fill in number of kilograms of shipment.
4	Fill in "0" for pre-treatment and "1" for post-treatment sample.
5	Fill in numbers for day, month, and year.
6	Fill in date sample was taken.
7	Fill in sample number (you assign a number).
8 Code	For methyl bromide, enter MEBR.
9	Fill in dosage rate in grams/cubic meter. Fill in dosage (total amount of fumigant) in grams.
10	Fill in number of hours of exposure.
11	Fill in number of hours for aeration.
12	Fill any remarks.
13	Print your name.
14	Fill in your office telephone number. Use the commercial number.

Distribution

TABLE A-1-1: Distribution of APHIS Form 2061

If:	Then:
Original	Send under separate cover to NMRAL
Yellow copy	Mail to NMRAL with sample
Pink copy	Keep for your files

NMRAL Address:

National Monitoring Residue and Analysis Laboratory
P.O. Box 3209
Gulfport, MS 39505
Phone: (601) 863-8124
Fax: (601) 867-6130

TABLE A-1-2: Root and Tuber Vegetables

Codes	
001	Beet
002	Carrot
003	Dasheen (taro)
004	Horseradish
005	Jerusalem artichoke
006	Parsnip
007	Potato
008	Radish
009	Rutabaga
010	Sugar beet
011	Sweet potato
012	Turnip
013	Yams
019	Other roots and tubers

TABLE A-1-3: Leaves of Root and Tuber Vegetables

Codes	
020	Beet
021	Carrot
022	Turnip
023	Dasheen (taro)
024	Parsnip
025	Rutabaga
026	Sugar beet
039	Leaves of other roots and tubers

TABLE A-1-4: Bulb Vegetables

Codes	
040	Garlic
041	Leek
042	Onion
043	Shallot
049	Other bulb vegetables

TABLE A-1-5: Leafy Vegetables (Other Than *Brassica*)

Codes	
050	Celery
051	Corn salad
052	Dandelion
053	Endive
054	Garden cress
055	Lettuce
056	Spinach
057	Rhubarb
058	Parsley
059	Swiss chard
069	Other leafy vegetables

TABLE A-1-6: *Brassica* (Cole) Leafy Vegetables

Codes	
070	Broccoli
071	Brussels sprout
072	Cabbage
073	Chinese cabbage
074	Cauliflower
075	Collard
076	Kale
077	Kohlrabi
078	Mustard greens
079	Rape greens
089	Other <i>Brassica</i> leafy vegetables

TABLE A-1-7: Legume Vegetables

Codes	
090	Beans
091	Peas
092	Lentils
093	Soybeans
094	Fava beans
099	Other legume vegetables

TABLE A-1-8: Foliage of Legume Vegetables

Codes	
100	Beans
101	Peas
102	Soybeans
109	Foliage of other legume vegetables

TABLE A-1-9: Fruiting Vegetables Except Cucurbits

Codes	
110	Eggplant
111	Pepinos
112	Pepper
113	Pimentos
114	Tomatoes
119	Other fruiting vegetables except cucurbits

TABLE A-1-10: Fruiting Vegetables (Cucurbits)

Codes	
120	Citron melon
121	Cucumber
122	Gherkins
123	Melons (includes cantaloupe and muskmelon)
124	Pumpkin
125	Squash
126	Watermelon
139	Other fruiting vegetables (cucurbits)

TABLE A-1-11: Citrus Fruits

Codes	
140	Calamondin
141	Citrus citron
142	Grapefruit
143	Lemon
144	Lime
145	Mandarin
146	Orange
159	Other citrus fruits

TABLE A-1-12: Pome Fruits

Codes	
160	Apple
161	Crab apple
162	Loquat
163	Pear
164	Quince
179	Other pome fruits

TABLE A-1-13: Stone Fruits

Codes	
180	Apricot
181	Cherry
182	Nectarine
183	Peach
184	Plum
185	Prune
199	Other stone fruits

TABLE A-1-14: Small Fruits and Berries

Codes	
200	Blackberry
201	Blueberry
202	Boysenberry
203	Cranberry
204	Currant
205	Dewberry
206	Elderberry
219	Other small fruits and berries

TABLE A-1-15: Cereal Grains

Codes	
220	Barley
221	Buckwheat
222	Millet
223	Oats
224	Popcorn
225	Rice
226	Rye
227	Sorghum
228	Teosinte
229	Triticale
230	Wheat
231	Wild rice
232	Corn
239	Other cereal grains

TABLE A-1-16: Forage, Fodder, and Straw of Cereal Grains

Codes	
240	Barley
241	Corn
242	Sorghum
243	Wheat
259	Other forage, fodder, and straw

TABLE A-1-17: Grass Forage, Fodder, and Hay

Codes	
260	Bermuda grass
261	Bluegrass
262	Fescue
279	Other grass forage

TABLE A-1-18: Nongrass Animal Feeds

Codes	
280	Alfalfa
281	Clover
282	Sainfoin
283	Trefoil
284	Vetch
299	Other nongrass animal feed

TABLE A-1-19: Tree Nuts

Codes	
300	Almond
301	Beechnut
302	Brazil nut
303	Butternut
304	Cashew
305	Chestnut
306	Filbert
307	Hickory
308	Macadamia nut
309	Pecan
410	Walnut
419	Other nuts

TABLE A-1-20: Herbs and Spices

Codes	
420	Anise
421	Borage
422	Basil
423	Camomile
425	Catnip
426	Chives
427	Curry
428	Dill
429	Fennel
430	Horehound
431	Lavender
432	Marigold
433	Marjoram
434	Pennyroyal
435	Rosemary
436	Sage
437	Savory
438	Sweet bay
439	Tansy
440	Tarragon
441	Thyme
442	Woodruff
443	Wormwood
449	Other herbs and spices

TABLE A-1-21: Miscellaneous Fruits

Codes	
500	Kiwi
503	Avocado

[illegible]

A-1-11

Example (Reverse)

TARPAULIN FUMIGATION				
NOTE: In preparation for the fumigation and prior to site selection the officer should have determined (1) the immediate pest risk associated with the infested commodity, (2) the temperature requirements for the fumigation, and (3) the permeability of the packaging.				
CHECKLIST OF MATERIALS AND PROCEDURES (Consider each of the listed items when performing a fumigation.)				
MATERIALS				
FUMIGATOR			PPO	
Tarpaulin	Tarpaulin Supports	Volatilizer	Gas Analyzer	
Sand Snakes	Fans	Heat Supply	Driente	
Water Snakes	Extension Cords	Exhaust Fans		
Loose Sand	2-3 Prong Plug Adapters	Sampling Tubes	Self Contained (SCBA) Breathing Apparatus	
Burlap / Padding	Fumigant	Scale	Halide Detector	
Masking Tape	Gas Introduction Line	Fumigation Placards	Tape Measure	
Pesticide & Spray Equipment	T/C Gas Analyzer	SCBA - Self Contained Breathing Apparatus	Thermometer	
			Gas Detector Kit and Detector Tubes	
PROCEDURES (SECTION III TREATMENT MANUAL)				
PREPARATION		FUMIGATION		
1. SITE SELECTION	3. TARPULIN ENCLOSURE	4. TREATMENT SCHEDULE DETERMINATION	Introduction Rate	
Ventilated Area	A. COVER	Plant Pest	Check for Leaks	
Sheltered Area	Condition	Commodity Temperature	6. SAFETY	
Impervious Surface	Air Space, Above Load	Space Temperature	Gas Detection Tests	
Non-work Area	Floor Area 30 cm (12") Space Around Load	Volume Determination	7. CONCENTRATION READINGS	
Proximity to Electrical Source	Overlap 45 cm (18") Border	Sorptive Commodity	T/C Gas Analyzer Standardization	
Proximity to Commodity	B. SNAKES	Amount of Fumigant	Time Intervals	
2. ARRANGEMENT OF COMMODITY & EQUIPMENT	Contact Along Sides	5. FUMIGANT INTRODUCTION	Gas Distribution	
Stack Size Limitation	Contact Around Corners	Area Clear of Unauthorized Personnel	Maximum / Minimum	
Air Space, Below and Between Load	Overlap 15 cm (6") Minimum	Cover condition	8. AERATION (MULTIPLE STACKS)	
Placement of Tarp. Supports	C. SAND	Fan Operation	Exhaust Fan(s)	
Placement of Padding	Perimeter	Contaminant Gases	Exhaust Tube(s)	
Placement of Fans	D. ADHESIVE	Fumigant Cylinder Weight	Exhausted in a Non-fumigation Area	
Placement of Gas Introduction Line(s)	Perimeter	Gas Line Connections	Negligible Gas Readings Before Tarpaulin Removal	
Placement of Sampling Lines		Volatilizer Heated	Halide or Other Detector Tests	
PPQ FORM 429 (Reverse)		★ U.S. GOVERNMENT PRINTING OFFICE: 1997 417-294/60024		

FIGURE A-1-3: Example of PPQ Form 429 (Fumigation Record) (Back)

Purpose

This form is to be used as a station record for all treatments conducted in approved chambers or in temporary enclosures (tarpaulin, in containers, truck vans, railroad cars, ships, warehouses, or other enclosures). Treatments conducted under temporary enclosures require minimum gas concentration readings be reported.



Important

Aircraft fumigation is not authorized.

Block	Instruction
1	Fill in.
2	Fill in scientific name(s) of pest or simply “precautionary” when fumigation is mandatory as a condition of entry or movement. Include station interception number(s) if fumigation is based on pest findings.
3-20	Fill in. In completing Block 12, if the commodity is a fruit or vegetable, enter the common name. The common name is more descriptive. If available, include the variety. By using common names and names of varieties, tolerances to the fumigant can be better predicted.
21	Fill in fumigant (for example, MB, CB, PH, EO, or SF), schedule number, dosage rate, and exposure period (4 lbs/1,000 ft ³ for 12 hours).
22	Fill in beginning temperatures in space under enclosure (a) and commodity temperature (b). Specify Centigrade or Fahrenheit.
23	Fill in type of thermal conductivity unit used (Fumiscope® or Gow-Mac®) and the serial number of the conductivity unit.
24	Fill in chamber, tarpaulin, structure, or type of carrier such as truck van, railroad car, or ship. If a container was used, indicate if covered by tarpaulin. Fill in type of tarpaulin used—single or multiple-use and the thickness (4 mil or 6 mil).
25	If treatment is conducted outside, fill in the weather conditions.
26	Fill in.
27	If commodity is treated under APHIS Section 18 Exemption, check “yes.” If commodity is treated at label dosage or less, check “no.”
28-30	Fill in.
31	If food or feed, check “yes.” If nonfood/nonfeed, check “no.”
32	Record time gas introduction started (a) and finished (b). Treatment does not start until gas is completely introduced in the chamber or enclosure.
33	When the fumigant dosage is calculated by weight, fill in the dosage to the nearest quarter pound. If liquid measures are needed, convert from weight to volume by using the conversion table in Appendix D.
34	If additional gas is required, note under Remarks (Block 40) and show calculations (Block 41).
35	Check appropriate box. Sample number refers to Block 7 on APHIS Form 2061 (Residue Sample for Food or Feed Product).
36	Record the date and time you take concentration readings. Treatment schedules specify when to take concentration readings.
37	Fumigants such as methyl bromide may be read and recorded directly from the T/C unit scale. However, readings for fumigants such as sulfuryl fluoride and ethylene oxide must be corrected to get the true concentration reading. Each T/C unit used for fumigants other than methyl bromide is calibrated with a correction factor. The factor is multiplied times the dial reading, to give the actual concentration. Record phosphine gas concentrations as ppm as determined by detector tubes. Specify where the gas sampling line was placed: space or commodity. Use at least three lines. Use additional lines as needed.
38	Fill in.
39	Fill in time as well as the reading. Refer to the section in the manual that is tabbed “Aeration” for guidelines.
40	Note any unusual events that occurred during the treatment. When it is necessary to abort a fumigation, details concerning the termination of the treatment should be reported in this block.

Block	Instruction
41	Show all calculations used in determining the volume of temporary enclosures. Also show calculations when additional gas is added.
42-43	Sign and date.
Reverse Side	Use as a check list.

Distribution

Give the original and one copy to your supervisor for review. The supervisor should keep the original for port files and send one copy to:

USDA, APHIS, PPQ, CPHST
Treatment Support & Certification
1017 Main Campus Drive, Suite 2500
Raleigh, NC 27606

PPQ Form 519 (Compliance Agreement)

Example



UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE PLANT PROTECTION AND QUARANTINE PROGRAMS		
COMPLIANCE AGREEMENT		
1. NAME AND MAILING ADDRESS OF PERSON OR FIRM Mr. Tom Jones Beat-A-Bug 3458 West 7th Street Philadelphia, PA 19000		2. LOCATION All piers/warehouses in the Philadelphia area involved with fresh fruit and vegetable importations
3. REGULATED ARTICLE(S) Fresh produce entering under Quarantine 56		
4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS Plant Quarantine Act of 1912 Federal Plant Pest Act of 1957		
5. I/We agree to the following: --To provide proof of current pesticide applicators certification upon demand. --To provide a certified applicator at the fumigation site at times specified by PPQ. --To provide all necessary equipment (including safety equipment) and labor. Labor and equipment are both subject to the approval of the PPQ certified applicator. --To follow all safety requirements or procedures of the Occupational Safety and Health Act, Environmental Protection Agency, State, local, or additional requirements specified by the PPQ certified applicator including verification of the training of my employees actually working at the fumigation site. --To follow all instructions and procedures required by PPQ in the planning, set up, and conduct of the fumigation. --That the PPQ certified applicator will monitor/supervise the fumigation. --That the PPQ certified applicator has the authority to approve or disapprove a fumigation at any point if the treatment is or will not be safe or effective or if any of the terms of this agreement are not met.		
17. SIGNATURE 	8. TITLE Fumigator	9. DATE SIGNED September 1, 1992
The affixing of the signatures below will validate this agreement which shall remain in effect until cancelled, but may be revised as necessary or revoked for noncompliance.		10. AGREEMENT NO. PENN-3-28
		11. DATE OF AGREEMENT September 2, 1992
12. PPQ OFFICIAL (Name and Title) Victor S. Smith Officer in Charge		13. ADDRESS USDA-APHIS-PPQ 2432 Lakeview Drive, Room 10 Philadelphia, PA 19000 (215) 555-4980
14. SIGNATURE 		15. ADDRESS
16. STATE AGENCY OFFICIAL (Name and Title)		
17. SIGNATURE		
PPQ FORM 519 AUG. 1977 REPLACES PPQ 274, 519, 560, AND AQI 53, WHICH ARE OBSOLETE		

FIGURE A-1-4: Example of PPQ Form 519 (Compliance Agreement)

Purpose

The PPQ Form 519 is a form that provides a signed, written agreement with fumigators to indicate their understanding of methods, conditions, and procedures necessary for compliance with regulations.

Instructions

Many PPQ ports maintain Compliance Agreements with commercial pesticide applicators. PPQ may maintain compliance agreements, however if they cancel an agreement, PPQ should not ban an exterminator from doing business, or applying regulatory treatments. PPQ may however, discontinue certification of a particular treatment that did not meet the required time, temperature, and concentration levels indicated in the treatment schedule. Similarly, PPQ may not want to begin monitoring a fumigation if the tarp appears inadequate and excessive leakage may lead to a safety problem.

Review compliance agreements at least annually, but preferably twice a year. Amend compliance agreements as appropriate.

If the establishment fails to abide by the conditions of the agreement, then the Port Director may cancel that agreement orally or in writing.

If you make an oral cancellation, confirm it in writing as soon as possible. The establishment has 10 days to appeal the cancellation. Appeals must be made to the Deputy Administrator.

Block	Instructions
1,8,9, 11-13	Fill in.
2	Fill in the location of the specific property(s) for which the agreement is signed.
3	Fill in the specific regulated articles to which the agreement applies.
4	Fill in the titles, parts, and subparts.
5	Check as appropriate.
6	Outline stipulations which apply to the fumigator for each quarantine or regulation affecting the fumigator. Make clear to the fumigator that stipulations in the compliance agreement do not preclude compliance with other sections of the quarantine or regulations. If space in Block 6 is inadequate for listing the stipulations, then write "See Attached Sheets."
7	Have a responsible official of the fumigator's sign.
10	Assign a compliance agreement number.
14	Have the PPQ Port Director sign.
15-17	Complete only when State is involved in cooperating with enforcing Federal quarantines.

Distribution

If:	Then:
Compliance agreement affects one work unit	GIVE original to the fumigator, and KEEP a copy for port files in the area where the fumigator is located
Compliance agreement affects more than one work unit	GIVE original to the fumigator, and GIVE copies to all work units affected by the compliance agreement, and KEEP a copy for port files in the area where the fumigator is located

Purpose

PPQ Form 523 is issued for treatments and other remedial measures ordered for carriers, cargoes, or articles arriving in the United States or moving interstate. The PPQ Form 523 also serves as a means to communicate plant pest and animal disease risk situations between ports, Program Support, and International Services personnel in foreign countries.

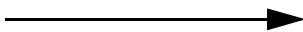
Instructions

When a suspected pest is found, advise the owner, agent, or ship's captain that a suspected pest has been found. If identification is confirmed, quarantine action will be required. For ships, note the information on the PPQ Form 288 (Ship Inspection Report). Hold all cargo from infested holds pending determination. Take appropriate

safeguards to prevent pest dissemination for infestations of cargo or stores. If it is necessary to discontinue discharge of cargo from the vessel, promptly inform Customs.

Block	Instructions
1,2,4	Fill in.
3	Fill in the scientific and common name of the pest. Indicate if identification is tentative; however, final identification is required on copies sent to Program Support. List the interception number.
5	Fill in the name and address of the firm sending shipment. Avoid the use of intermediate parties such as freight forwarders, etc.
6	Fill in the name and quantity of article (include description on accompanying documentation and additional terms if needed to clearly describe the article). If plant material is involved, fill in the genus of the plant.
7	Enter bill of lading, container numbers, air waybill number, vessel hold number, vehicle license number, etc.
8	Fill in the consignee or owner and address. Use intermediate parties such as the broker or carrier if owner's name is unavailable.
9	Fill in where the article is located, e.g., location of premises, pier, dock, container yard, hold space, etc.
10	Fill in the origin of the article.
11	<div> <div>Name or ID—</div> <div>Fill in vessel name, airline and flight number, trucking firm and license number, railroad car number, container number, etc.</div> </div> <div> <div>Point of Lading—</div> <div>Fill in foreign port, or place where loaded, e.g., Leghorn, Italy; Jeddah, Saudi Arabia; etc.</div> </div> <div> <div>Date of Arrival—</div> <div>Fill in the date the article arrived at port or point where PPQ Form 523 is issued.</div> </div>
12	List action required; e.g., treatment schedule, return to origin. Include safeguards pending final quarantine action (if any). If more than one action is required, then list actions as a, b, c, etc. If an article is prohibited, then fill in that the article is prohibited per regulation (list title, part, and subpart from the CFR's), and any other reasons in addition to action required.
13	"Begin Specified Action Within" means the actual beginning of a treatment or emergency action or a good faith effort to begin contract proceedings or preparation for the action. Fill in the time (number of hours or days) action must begin after receipt of this notice. Specify a time for complying with each action listed in Block 12, e.g., a) 2 hours; b) 48 hours.
14	Sign in this Block.
15	Obtain the signature of the owner, agent, or person having immediate jurisdiction over the carrier or articles. If someone other than the owner signs, state the name of the company.
16	Fill in action taken. Be specific that actions listed in Block 12 were carried out. Explain any acceptable deviations from the actions listed in Block 12. Sign and date the original and the copy in the hands of the owner/agent. If the owner/agent copy is not available, then make a copy and deliver it to the owner/agent.

Use the following table to determine if any special instructions apply:

If issuing PPQ Form 523 for:	And:	Then:
An infested vessel	The vessel is sailing without treatment	SEE special instructions that follow
	The vessel is sailing to a subsequent port for treatment	AMEND Block 16 of the Form to read "Ship authorized movement to (port) for treatment." FORWARD copies of the Form to the next port
	The structural design prevents an adequate fumigation	CONSULT your Regional Director for an alternate treatment and/or cleaning, and NOTE conditions on the Form 523, then GO to "Distribution"
	Treatment will be conducted at the port	GO to "Distribution"
Infested cargo	It is covered by an invalid, inaccurate, or improperly issued phytosanitary certificate, treatment certificate, or military customs certificate	ATTACH a copy of the document to the copy of the Form that you send to Program Support after the treatment is completed, then GO to "Distribution"
	Not covered by any of the certificates described in the cell above	GO to "Distribution"
Other than above		GO to "Distribution"

Special Instructions for Infested Vessels Sailing Foreign Without Treatment

When an infested vessel is allowed to sail foreign without treatment, type the following statement on the reverse side of the PPQ Form 523 and reference it in Block 12 on the face of the form.

“The requirements of the Emergency Action Notification shown on the front of this form are suspended upon condition that this vessel shall leave the territorial limits of the United States within ____ hours after receipt of this notice. This vessel shall not reenter any port in the United States unless it has been treated in accordance with the notification and certified by the person who applied the treatment. If the certificate is not presented to the PPQ officer when arriving at a port in the United States, or if the PPQ officer for any other reason is not satisfied that the infestation has been eliminated, the notification shall immediately become effective and treatment required.”

Distribution

TABLE A-1-22: Determine Distribution of PPQ Form 523 (Emergency Action Notification)

If:	Then:
Part 1	GIVE to the owner or agent having immediate jurisdiction over the carrier or articles. In the case of vessels, give to the captain.
Part 2	KEEP for your port files.
Part 3	GIVE to the broker or agent (if more than one copy is needed, then make photocopies).
Part 4	SEND to Program Support within 5 days after completion of action. Include the final pest identification and the original of any accompanying documents that attest to actions taken at the point of origin (e.g., phytosanitary certificates, treatment certificates, military customs certificates, certificates of origin, etc.).
Other copies	<p>SEND to Area Director at proposed destination of material for possible follow-up action.</p> <p>SEND to Regional Office or originating office as required locally.</p> <p>SEND to subsequent PPQ office if action is to be completed there (mail one copy, and send one copy accompanying the article or carrier) or if khapra beetle or snails are found on cargo or carrier.</p>

See the Airport and Maritime Operations Manual for instructions on completing a PPQ Form 518.

PPQ Form 449-R (Temperature Recording Installation Report)

[illegible]

FIGURE A-1-6: PPQ Form 449-R (Temperature Recording Installation Report)

PPQ Form 203 (Foreign Site Certificate of Inspection and/or Treatment)

U.S. DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE PLANT PROTECTION AND QUARANTINE		1. CERTIFICATE NO.	2. COUNTRY OF ORIGIN
FOREIGN SITE CERTIFICATE OF INSPECTION AND/OR TREATMENT		3. DATE LOADED	4. FOREIGN PORT OF EXPORT
		5. CARRIER IDENTIFICATION	
7. SHIPPER (Name & Address)		8. CONSIGNEE (Name & Address - Include Zip Code)	
9. COMMODITY	10. NO. CONTAINERS (Identify as box, sack, 1/2 Bruce box, flat, card- board box, etc.)	11. CONTAINER IDENTIFICATION MARKS	
12. LOCATION OF INSPECTION AND/OR TREATMENT		13. DATE	
This certifies that the shipment described above has been inspected and/or treated in accordance with agricultural requirements for entry into the United States.			
14. SIGNATURE OF PLANT PROTECTION AND QUARANTINE OFFICER		15. DATE ISSUED	

PPQ FORM 203
 (AUG 78)

FIGURE A-1-7: PPQ Form 203 (Foreign Site Certificate of Inspection and/or Treatment)

PPQ Form 556 (In Transit Cold Treatment Clearance Report)

U. S. DEPARTMENT OF AGRICULTURE Animal and Plant Health Inspection Service Plant Protection and Quarantine Programs IN TRANSIT COLD TREATMENT CLEARANCE REPORT				1. NAME OF CARRIER		2. PORT OF LOADING		3. PAGE NO. of					
INSTRUCTIONS: Refer to PPQ Treatment Manual Sec. III part 10 and CFR 319.56-2d.				4. PORT REPORTING		5. DATE		6. TIME					
				7. PORT REPORTING		8. DATE		9. TIME					
10. CONTENTS OF COMPARTMENTS													
COMMODITY	NO. CASES	COMMODITY	NO. CASES	COMMODITY	NO. CASES	COMMODITY	NO. CASES	COMMODITY	NO. CASES				
Apples		Nectarines		Pears		Plums							
Cherries		Oranges		OTHER (Specify)		OTHER (Specify)							
Grapes		Peaches											
INSTRUMENT EXAMINATION					INSTRUMENT EXAMINATION								
11. INSTRUMENT NO.		12. WAS INSTRUMENT LOCKED? YES <input type="checkbox"/> NO <input type="checkbox"/>		17. INSTRUMENT NO.		18. WAS INSTRUMENT LOCKED? YES <input type="checkbox"/> NO <input type="checkbox"/>							
13. PRINTING INTERVAL		14. CHART SPEED (in. or cm/24 hours)		19. PRINTING INTERVAL		20. CHART SPEED (in. or cm/24 hours)							
15. ACTUAL LENGTH OF RECORD		16. CALCULATED LENGTH OF RECORD		21. ACTUAL LENGTH OF RECORD		22. CALCULATED LENGTH OF RECORD							
23. CALIBRATION RECORD SATISFACTORY <input type="checkbox"/>		IF NOT SATISFACTORY - WHY				SIGNED BY							
24. IDENTIFY COMPARTMENTS		TEMPERATURE RECORD											
25. Initial fruit temp. recorded		MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.
26. Loading completed		DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
27. TREATMENT COMMENCED	2.2°C (36°F)												
	1.7°C (35°F)												
	1.1°C (34°F)												
	0.6°F (33°F)												
	0°C (32°F)												
28. Total No. days treatment to time of clearance		TEMP.	DAYS	TEMP.	DAYS	TEMP.	DAYS	TEMP.	DAYS	TEMP.	DAYS	TEMP.	DAYS
29. Pulp temperatures (manual check by PPQ officer)		MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.
30. Recorded temperatures	BULB NO.	TEMP.	BULB NO.	TEMP.	BULB NO.	TEMP.	BULB NO.	TEMP.	BULB NO.	TEMP.	BULB NO.	TEMP.	
31. CARGO STOWAGE SATISFACTORY <input type="checkbox"/>		IF NOT, SPECIFY WHY				32. SIGNATURE OF OFFICER							

PPQ FORM 556
AUG. 1977

REPLACES PPQ FORM 556(9/74) WHICH MAY BE USED

FIGURE A-1-8: PPQ Form 556 (In Transit Cold Treatment Clearance Report)

APHIS Form 205-R (Instructions and Worksheet for Calibrating Portable Temperature Sensors)

[illegible]

FIGURE A-1-9: APHIS Form 205-R (Instructions and Worksheet for Calibrating Portable Temperature Sensors)

APHIS Form 207-R (Sensor Location Diagram Fruit Weights and Pulp Temperatures)

SENSOR LOCATION DIAGRAM FRUIT WEIGHTS AND PULP TEMPERATURES				USDA-APHIS	1. DATE
2. NAME OF FACILITY		3. TANK NUMBER		4. TEST NUMBER	
INSTRUCTIONS					
<p>Show sensor numbers, and their approximate location within each basket. (Use three or four sensors per basket.) Place an asterisk (*) beside fruit pulp sensors. (Use one or two per test.) Indicate, by arrow, the direction of water flow in the tank. (If the tank is of an unusual shape (e.g., round) please use the reverse side of this form to draw a diagram, showing position of baskets and sensors.)</p>					
BASKET NO. 1	BASKET NO. 2	BASKET NO. 3	BASKET NO. 4	BASKET NO. 5	
5. WEIGHT (g) OF 10 FRUITS SELECTED AT RANDOM		6. WEIGHT (g) OF 5 LARGEST FRUITS	7. FRUIT PULP TEMPERATURES (Taken at random)	8. NET WEIGHT OF A TYPICAL FIELD CRATE OF MANGOES	
				9. NUMBER OF FIELD CRATES PER LOADED BASKET	
MEAN WT. = (g)		MEAN WT. =	MEAN TEMP. =		
10. REMARKS					

APHIS FORM 207-R (OCT 95) (Previous edition is obsolete)

FIGURE A-1-11: APHIS Form 207-R (Sensor Location Diagram Fruit Weights and Pulp Temperatures)

Appendix A Forms

APHIS Form 208 (Performance Test for Mango Hot Water Immersion Tank)

APHIS Form 208 (Performance Test for Mango Hot Water Immersion Tank)

PERFORMANCE TEST FOR MANGO HOT WATER IMMERSION TANK		USDA-APHIS	1. DATE OF TEST
2. NAME OF FACILITY		3. LOCATION	
4. NAME OF FACILITY MANAGER (Type or print)			
5. TELEPHONE NUMBER ()		6. FAX NUMBER ()	
7. FRUIT VARIETY		8. STAGE OF RIPENESS	
9. TEMPERATURES AT START OF TEST			
9A. THERMOSTATIC SET POINT	9B. WATER IN THE TANK	9C. FRUIT PULP (Average)	9D. AMBIENT AIR
10. SIGNATURE OF INSPECTOR		11. NAME OF INSPECTOR (Type or print)	
12. NOTES			

BASKET NO.:		TANK NO.:		TEST NO.:							
Readings taken at specific times (minutes) before calibration adjustment (if any). Use 1 or 2 pulp sensors per tank. Indicate pulp sensors with an asterisk (*).											
PORTABLE SENSOR NO. (Use at least 3)	CALIBRATION ADJUSTMENT		0-1	1-2	2-3	3-4	5	30	60	75	90
		TIME									
		TEMP.									
		TIME									
		TEMP.									
		TIME									
		TEMP.									

FIGURE A-1-12: Calibration of Temperature Probes (Cold Treatment)

Location of Temperature Sensors in Containerized Cargo (Cold Treatment)

LOCATION OF TEMPERATURE SENSORS IN CONTAINERIZED CARGO

NAME OF VESSEL _____

CONTAINER NUMBER _____

PROBE 1 _____

PROBE 2 _____

PROBE 3 _____

SIGNATURE: _____ DATE: _____

TITLE: _____

FIGURE A-1-13: Location of Temperature Sensors in Containerized Cargo (Cold Treatment)

General Requirements for Approval of Integral Containers Used for Cold Treatment

- ◆ Containers must have adequate refrigeration, insulation, and thermostatic control to precool and uniformly hold fruit temperatures at 2.20 C (360 F) or below for the entire treatment period.
- ◆ Standards for Temperature Recording Instruments
- ◆ Recording instruments to be used for cold treatments conducted in self-refrigerated containers must be approved by the Oxford Plant Protection Center. When applying for approval, the specifications of the recorder and sensors must be submitted.
- ◆ The readings of the instrument have to be accurate to within plus or minus 0.30 C, or plus or minus 0.50 F of the true temperature range of +270 F to +370 F, with a resolution of 0.10 F or C.
- ◆ Sensors also will have an outer sheath of 0.25 inch (6.4 mm) diameter or less. The sensing element must be located within the first inch (2.5 cm) of the sensor.
- ◆ Sensors must be capable of collecting temperature data at least once every hour, and recording or storing data for up to 30 days.
- ◆ System should have a visual display so that temperatures can be reviewed manually during the treatment, and for ease of calibration.
- ◆ Printout must identify each sensor and indicate time and temperature. An identification number has to be printed so that the recorder and printout can be matched.
- ◆ If the recorder is to be carried inside the container, the data should be accessible without opening the container.
- ◆ At least three sensors are necessary for each container.



**Application for USDA-APHIS Approval of Self-Refrigerated Containers (revised 3/05/04)
(For use in conducting quarantine cold treatments in-transit under USDA regulations)**

Web site to find containers and vessels with a search and a printable list:

<http://www.cphst.org/treatment/containers.cfm>

Instructions:

- (1) Review the regulatory requirements spelled out in the attachment on page five and the USDA Treatment Manual.
- (2) This form is arranged in five parts. You must answer all of the questions asked if applicable. Approval shall be denied or delayed if any items are left blank if applicable.
(Note: If some items are not applicable, write "N/A.")
- (3) Send the completed form to the following office:

New address as of March 29, 2004
UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL PLANT HEALTH INSPECTION SERVICE
PLANT PROTECTION AND QUARANTINE
CENTER FOR PLANT HEALTH SCIENCE AND TECHNOLOGY
TREATMENT QUALITY ASSURANCE UNIT
1730 Varsity Drive, Suite 400
Raleigh, North Carolina 27606 USA
Fax: (919) 855-7493

This form was completed by:

1. Name: _____
2. Title: _____
3. Signature: _____
4. Name of Company: _____

Part I. The Container Itself (or Series of Containers)

A. Owner Container Identification

1. Owner's Operating Numbers: _____ through _____
(Total number of containers in this series: _____)
2. Manufacturer's Serial Numbers: _____ through _____
3. ABS D.T. Numbers: _____
4. Date of Manufacture: _____
5. Owner Container Line: _____ Division: _____
6. Company contact person: _____
7. Address: _____
8. Fax: _____ 9. Telephone: _____
10. E-mail: _____

(Note: If the information for the owner container line i.e. address, fax number, telephone number, and email are missing the container series will not be certified by the USDA. Do not use leasing company as owner.)

B. Container Manufacturer

1. Container Manufacturer: _____
2. Company contact person: _____
3. Address: _____
4. Fax: _____ 5. Telephone: _____
6. E-mail: _____

C. Container Leasing Company (if known) or other

1. Container Leasing Company: _____
2. Company contact person: _____
3. Address: _____
4. Fax: _____ 5. Telephone: _____
6. E-mail: _____

D. Container Size

1. External dimensions (in feet): Length: _____ Height: _____ Width: _____
2. Internal cubic capacity (in cubic feet): _____

E. Insulation

1. Type of insulation used: _____
2. Thickness (range in inches): _____

Part II. The Refrigeration Unit

A. Make and Model: _____

B. Defrost Cycle: Is it fully adjustable (e.g., 3, 6, 9, 12, 24 hours)? _____

C. Cooling Capacity

1. Full Cool: _____ BTU; _____ Kcal

2. Partial cool: _____ BTU; _____ Kcal

D. Age of equipment (if not new): _____

E. Air Flow

1. Bottom Delivery _____ only bottom delivery is acceptable

2. Delivery method: _____

3. Air flow rate (cubic feet/minute)

@ 0 inches of water: _____ @ 0.75 inches of water _____

Part III. The Controller and Recorder

A. Make and Model

1. Controller: _____ Type: _____

2. Recorder: _____ Type: _____

B. Adjustment Capability: _____

C. Age of Equipment (if not new): _____

D. Is the temperature record printed on chart paper during the voyage, or is it stored and later downloaded by computer after the voyage is completed? _____

E. Frequency of recording (*Note: There must be an indication of the temperature and time from each sensor, at least once an hour.*) _____

F. Location of the unit:

Inside the container _____ Outside the container _____

If the controller or printer are accessible from the outside (without opening doors), will this unit be locked or sealed while in use? _____

Part IV. The Temperature Sensors

A. Temperature Sensors provided by owner. NO _____. (proceed to Part V.) YES _____ (go to B.)

Shipment of fruit is required to have USDA approved temperature sensors. See page 5.

B. Number of Sensors installed: (*Note: The minimum number is three.*) _____

C. Description of sensors

1. Length (in inches): _____ 2. Diameter (in inches): _____ 3. Type: _____

D. If required, can the controller/recorder accommodate several additional sensors? _____

If so -- 1. What type? _____ 2. How many? _____

E. Response time: _____

F. Scale: The temperature recording will be in: Fahrenheit _____ Centigrade _____

G. Accuracy : _____ (Note: Sensors must print at least in tenths of a degree, and must be accurate to within +/-0.3 degrees C, or +/- 0.5 degrees F.)

H. Length of the cable wires leading from the controller to the sensors (Note: The wires must be long enough to reach fruits in all parts of the container.) _____

I. Additional comments (if any): _____

Part V. The longevity of refrigerated containers used for in-transit cold treatment of fruits under our USDA protocol.

A. How frequently are refrigerated containers inspected by certified inspectors for wear due to usage, and to determine if repairs are needed? Are certification inspections done annually? These inspections may include (but are not limited to) reefer body, machinery construction and operation, conversion of refrigerant to non-CFCs, container walls (foam insulation), and tightness of doors.

B. Does your company have the capacity to track which containers are approved by USDA? (This means the usage, maintenance and repair histories of each approved container. We are also interested to know if some of the containers, previously approved, have already been scrapped.)

C. Generally, how long (in years) does a refrigerated container provide satisfactory service to the industry? The USDA wants to insure that cold treatments done in-transit are done in the best-made and well-maintained containers, able to withstand treatment requirements.

Attachment: General Requirements for Approval of Containers Used for Cold Treatment

[Note: This page is for general information only. Submit it with the application as well as the cover letter. This information is taken from the Treatment Manual (USDA APHIS PPQ)]

Containers must have adequate refrigeration, insulation, and thermostatic control to precool and uniformly hold fruit temperatures at 2.2° C (36° F) or below for the entire treatment period.

Standards for Temperature Recording Instruments

Recording instruments used for cold treatments conducted in self-refrigerated containers must be approved (in advance) by the Center for Plant Health Science and Technology.

The readings of the instrument have to be accurate to within plus or minus 0.3° C, or plus or minus 0.5° F of the true temperature range of +27° F to +37° F, with a resolution of 0.1° F or C.

Sensors also will have an outer sheath of 0.25 inch (6.4 mm) diameter or less. The sensing element must be located within the first inch (2.5 cm) of the sensor. At least three sensors are necessary for each container. Sensors can be supplied by owner, leasing company or shipper. Sensors must be capable of collecting temperature data at least once every hour, and recording or storing data for up to 30 days.

System should have a visual display so that temperatures can be reviewed manually during the treatment, and for ease of calibration.

Printout must identify each sensor and indicate time and temperature. An identification number has to be printed so that the recorder and printout can be matched.

If the recorder is to be carried inside the container, the data should be accessible without opening the container.

Please note: Approval of refrigerated containers by USDA-APHIS shall be limited to their expected useful life, not to exceed 15 years. All containers more than 15 years of age may be required to be certified again. Cancellation of approval may also result from any of the following reasons:

- Inadequate maintenance.
- The container is no longer being used to carry refrigerated fruits.
- The container is scrapped.
- The container has a change of ownership (had not been reported to the unit).
- The container has a change of serial number (had not been reported to the unit).

The four letter prefix may be changed on approved containers but the serial number needs to stay the same as the approved container. Change of prefix must be notified to the address on page 1. Ownership needs to be the same when changing prefix. De-listed containers may be re-approved for use, following re-application. However, USDA may ask to see maintenance records. Also, a physical inspection may be required.